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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/799,810	03/12/2004	William W. Shumway	HES 2003-IP-012703U1	8358
28857	7590	12/27/2007	EXAMINER	
CRAIG W. RODDY			FIGUEROA, JOHN J	
HALLIBURTON ENERGY SERVICES				
P.O. BOX 1431			ART UNIT	PAPER NUMBER
DUNCAN, OK 73536-0440			1796	
			MAIL DATE	DELIVERY MODE
			12/27/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No. 10/799,810	Applicant(s) SHUMWAY ET AL.	
	Examiner John J. Figueroa	Art Unit 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 October 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-41 and 63-66 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-41 and 63-66 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>6/18/07 &amp; 9/25/07</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Amendment***

1. The 35 U.S.C. 103(a) rejection of claims 1-9, 11-41, 63, 65 and 66 as unpatentable over United States Patent Number (USPN) 5,990,050 to Patel et al., (hereinafter 'Patel') in view of "Amphiphilic Copolymers", Langmuir 1998, 14, 5977-79, (hereinafter 'Perrin') has been maintained for reasons previously made of record in item 10 on page 5 of the Office Action mailed April 6, 2007, hereinafter 'OA'.
2. The 35 U.S.C. 103(a) rejection of claims 10 and 64 as unpatentable over Patel in view of Perrin (as applied above to independent claims 1, 29 and 63) and further in view of "Crude Oil Emulsions: A State of the Art Review", SPE 77497, hereinafter 'Kokal' has been maintained for reasons previously made of record in item 11 on page 7 of OA.

### ***Response to Arguments***

#### ***The 35 U.S.C. 103 Rejection over Patel and Perrin (item 10 of OA)***

3. Applicant's arguments in the response to OA filed October 5, 2007 (hereinafter 'Response) with respect to the 35 U.S.C. 103(a) rejection of claims 1-9, 11-41, 63, 65 and 66 as unpatentable over Patel in view of Perrin have been fully considered but deemed unpersuasive.

In response to Applicant's primary argument concerning Perrin not expressly teaching the emulsion facilitating particle to be "solid", Perrin teaches the polymeric emulsifier to be a hydrophobically-modified poly(sodium acrylate) having hydrophobic alkyl chains grafted onto a negatively charged backbone having a molecular weight of 50,000 g/mol. It is well known that polysodium acrylate (PSA), and grafted and/or crosslinked polymers thereof, are water-swellaable solid resin materials commonly used as water-absorbents in various applications. (See, e.g., USPN 4,727,097 to Kobayashi et al., col. 2, lines 16-47 disclosing grafted PSA polymers as highly water-absorptive resins; USPN 4,735,987 to Morita et al., col. 1, lines 17-41, teaching polysodium acrylate polymers as advantageous water-absorbent resin polymers; USPN 4,806,578 to Kobayashi et al., col. 2, line 43 to col. 3, line 14, disclosing PSA and grafted starch-PSA polymers as hydrophilic water-absorptive resin agents; USPN 4,826,680 to Lesniak et al., col. 3, lines 19-52; claims 5, 9, 18 and 22, teaching crosslinked PSA polymers as effective water-insoluble, water-swellaable resin materials; USPN 6,107,358 A to Harada et al., col. 1, lines 23-35, teaching cross-linked PSA as a typical example of a water-absorbent resin; and the Japanese Abstract to JP 360179485 A to Miyayama et al., disclosing a graft of starch with PSA as a high-molecular, water-swellaable material for "waterstopping") [Examiner notes that these references are cited only as evidence of what is commonly known in the art and not relied upon as grounds for the instant rejection.]

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Consequently, because PSA and grafts thereof are known as water-insoluble, water-swellaable absorbent resin materials, they must be solid particles in *at least* the aqueous phase in Patel's invert emulsion (or in the presently claimed fluid).

In response to Applicant's arguments that VERSACOAT® and NOVAMUL®, disclosed in Patel as examples of a wetting agent/emulsifier for use in the composition, can also act as surfactants (and not just emulsifying agents), these emulsifiers are examples of a preferred embodiment in Patel. "Disclosed examples and preferred embodiments do not constitute a teaching away from a broader disclosure or nonpreferred embodiments." *In re Susi*, 440 F.2d 442, 169 USPQ 423 (CCPA 1971). A reference may be relied upon for all that it would have reasonably suggested to one having ordinary skill the art, including nonpreferred embodiments. *Merck & Co. v. Biocraft Laboratories*, 874 F.2d 804, 10 USPQ2d 1843 (Fed. Cir.), *cert. denied*, 493 U.S. MPEP 2123

Thus, the instant claims remain unpatentable over Patel and Perrin.

*The 35 U.S.C. 103 Rejection over Patel, Perrin and Kokal (item 11 of OA)*

4. Applicant's arguments with respect to these 35 U.S.C. 103(a) rejection of claims 10 and 64 as unpatentable over Patel in view of Perrin, and further in view of Kokal, have been fully considered but deemed unpersuasive.

Applicant did not provide any substantive arguments in Response traversing the instant rejection except to state that the instant claims depend from independent claims

that are allegedly patentable over Patel and Perrin. However, Applicant's arguments concerning Patel and Perrin were addressed above and were found unpersuasive.

Thus, the instant claims remain unpatentable over Patel, Perrin and Kokal.

### ***Conclusion***

**5. THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John J. Figueroa whose telephone number is (571) 272-8916. Examiner can normally be reached on Monday-Thursday 8:00-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, please contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JJF/RAG

A handwritten signature in black ink, appearing to read "Marc S. Zimmer".

MARC S. ZIMMER  
PRIMARY EXAMINER